

THE NLS

The National Longitudinal Surveys (NLS), sponsored by the Bureau of Labor Statistics (BLS), are a set of surveys designed to gather information at multiple points in time on the labor market experiences of six groups of men and women. Each of the six cohorts has been selected to represent all people living in the United States at the initial interview date and born during a given period. This selection allows weighted conclusions to be drawn about the sample group that can be generalized to the experiences of the larger population of U.S. residents born in the same period. Sample design procedures ensure that the labor market experiences of blacks, Hispanics, youths, women, and the economically disadvantaged can be examined. In 1986, the NLS expanded to include surveys of the children born to women who participate in the National Longitudinal Survey of Youth 1979 (NLSY79). Detailed information is gathered biennially on the child's home environment and cognitive, socioemotional, and physiological development. This unique set of national surveys offers researchers the opportunity to study large panels of men, women, and children over significant segments of their lives.

The NLS samples

Each of the NLS survey groups consists of 5,000 or more original members, some of whom have been surveyed over several decades. Interviews continue with four of the six cohorts, as well as the NLSY79 children and young adults. Table 1.1 summarizes the NLS survey groups, the sizes of the original samples, the span of years over which each group has been interviewed, and the current interview status of each group.

Development of the NLS

The National Longitudinal Surveys of Labor Market Experience began in the mid-1960s when the Office of Manpower Policy, Evaluation, and Research of the U.S. Department of Labor (DOL) contracted with the Center for Human Resource Research (CHRR) at The Ohio State University to conduct longitudinal studies of the labor market experiences of four population cohorts:

- Men 45 to 59 years of age—referred to as the “NLS of Older Men”—first surveyed in 1966

Table 1.1. The NLS: Survey groups, sample sizes, interview years, and survey status

Survey group	Age cohort	Birth year cohort	Original sample	Initial year / latest year	Number of surveys	Number at last interview	Status
Older men	45–59	4/1/06–3/31/21	5,020	1966 / 1990	13	¹ 2,092	Ended
Mature women	30–44	4/1/22–3/31/37	5,083	1967 / 1999	19	2,467	Continuing
Young men	14–24	4/1/41–3/31/52	5,225	1966 / 1981	12	3,398	Ended
Young women	14–24	1943–1953	5,159	1968 / 1999	20	2,900	Continuing
NLSY79	14–21	1957–1964	² 12,686	1979 / 2000	19	³ 8,399	Continuing
NLSY79 children	birth–14	—	⁴ —	1986 / 2000	8	³ 4,924	Continuing
NLSY79 young adults	15 and older ⁵	—	⁴ —	1994 / 2000	4	³ 2,143	Continuing
NLSY97	12–16	1980–1984	8,984	1997 / 2000	4	⁶ 8,209	Continuing

¹Interviews in 1990 were also conducted with 2,206 widows or other family members of deceased respondents.

²After dropping the military (in 1985) and economically disadvantaged nonblack/non-Hispanic oversamples (in 1991), the sample contains 9,964 respondents eligible for interview.

³The latest sample size available is from the 1998 survey.

⁴The sizes of the NLSY79 children and young adult samples

depend on the number of children born to female NLSY79 respondents, which is increasing over time. Information about the number interviewed in each survey is available in chapter 4.

⁵In 1998, the young adults eligible for interview were limited to those aged 15–20.

⁶The latest sample size available is from round 3.

- Women 30 to 44 years of age—the “NLS of Mature Women”—first surveyed in 1967
- Young men 14 to 24 years of age—the “NLS of Young Men”—first surveyed in 1966
- Young women 14 to 24 years of age—the “NLS of Young Women”—first surveyed in 1968

These four groups of Americans, known collectively as the “Original Cohorts,” were selected because each faced important labor market decisions of special concern to policymakers. The older men respondents faced decisions about the timing and extent of their labor force withdrawal at retirement age. Mature women were experiencing a return to the labor force as their children became independent. As the young men and young women completed their schooling, they began careers or joined the military, married, and started families.

The initial plan called for six interviews over a 5-year period with a nationally representative sample of approximately 5,000 individuals in each age/sex group. As the 5-year period ended, relatively high retention rates and the widespread interest generated by these data led to the decision to continue the surveys.

During 1976, consideration was given to a further extension of the NLS. On the basis of a survey of all known NLS data users and the recommendations of a panel of experts convened by the Department of Labor, investigators reached two decisions in 1977. First, investigators decided to continue the surveys of the four original cohorts. Due to attrition, interviewing of the older men’s and young men’s cohorts ended in 1990 and 1981, respectively; the women’s cohorts are still surveyed biennially. Beginning in 1995, the mature women and young women cohorts were administered the same survey instrument during the same field period. The data for the two cohorts are still presented separately on the CD-ROM.

The second decision made by investigators in 1977 was to begin a new longitudinal study of a panel of young men and women. This study would permit a replication of the analysis of the 1960s cohorts of young men and young women and assist in the evaluation of the expanded employment and training programs for youth legislated by the 1977 amendments to the Comprehensive Employment and Training Act (CETA).

Toward these ends, a national probability sample was drawn of civilian young women and men aged 14 to 21 (as of December 31, 1978), with overrepresentation of blacks, Hispanics, and economically disadvantaged nonblack/non-Hispanics. Funding from the Department of Defense allowed the selection of an additional group of young persons serving in the Armed Forces for interviewing. This sample of civilian and military youths, called the National Longitudinal Survey of Youth 1979 (NLSY79), was interviewed for

the first time in early 1979. The cohort was re-interviewed annually until 1994, although the military and economically disadvantaged nonblack/non-Hispanic subsamples were dropped for funding reasons after 1984 and 1990, respectively. In 1994, the survey was put on a biennial schedule.

The “Children of the NLSY79” survey, begun in 1986, further enhanced the NLS. With funding from the National Institute of Child Health and Human Development (NICHD) and a number of private foundations, detailed information on the development of children born to NLSY79 women has supplemented the data on mothers and children collected during the regular youth surveys. During these biennial surveys, interviewers administer a battery of child cognitive, socioemotional, and physiological assessments to NLSY79 mothers and their children. Since 1994, children aged 15 and older, the “Young Adults,” have replied to a separate survey with questions similar to those asked of their mothers. This sample is statistically representative of the children of women born during the years 1957 to 1964 who were residents of the United States in 1978.

In 1997, data collection began for the sixth NLS cohort. This survey documents the transition from school to work for a group of young people aged 12 to 16 as of December 31, 1996. The sample for this survey, the National Longitudinal Survey of Youth 1997 (NLSY97), was designed to be representative of the U.S. population born during the years 1980 to 1984. Through the NLSY97, researchers are able to identify characteristics defining the transition that today’s youth make from school to the labor market and into adulthood. Information from the NLSY97 allows researchers to compare the progress of this cohort with that of other NLS cohorts.

Purposes and content of the surveys

The primary purpose of the NLS is to collect data on the labor force experiences of adults and young adults. In addition, the surveys have regularly gathered information about a range of factors potentially affecting labor market attachment, including investments in education and training, geographic region of residence, local labor market conditions, the formative influence of parents, marital status and family responsibilities, socioeconomic status, and work-related attitudes and aspirations, as well as limiting factors such as health problems and job discrimination.

With the advent of the NLSY79 in the late 1970s, the content of the surveys expanded to reflect the interests of other governmental agencies besides the Department of Labor. Support from the Department of Defense made possible the 1979–84 interviews of 1,280 youth enlisted in the military. In 1980, the Departments of Defense and Labor jointly sponsored the administration of the *Armed Services Vocational Aptitude Battery (ASVAB)* to the civilian and military NLSY79 samples. The Department of Defense

sponsored a similar administration for the NLSY97 cohort in 1997, consisting of the computerized version of the *ASVAB* (*CAT-ASVAB*) and the *Interest-Finder*.

Beginning in 1979, a 5-year cooperative effort of the National Center for Research in Vocational Education and CHRR resulted in a survey of the high schools of civilian NLSY79 respondents and the collection of detailed transcript information on potential high school graduates. In 1981, the National Institute of Education sponsored a set of time-use questions. Funding from the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse (NIDA) has made possible multiple fieldings of alcohol and substance abuse questions. The National Institute of Child Health and Human Development (NICHD) has provided funds for the assessments of the children of the NLSY79, the development of the fertility and child care components of the NLSY79, the young adult survey, and the child school survey conducted in 1995–96.

The 1989 NLS of Mature Women pension matching project was funded by the Bureau of Labor Statistics (BLS) in conjunction with the Women's Bureau and the Pension and Welfare Benefits Administration of the U.S. Department of Labor, the Social Security Administration, and the National Institute on Aging. The National Institute on Aging also funded the 1990 resurvey of living older men respondents and the family members of deceased respondents.

The National School-to-Work Office sponsored the 1996 survey of NLSY97 schools and the additional school survey in 2000. This agency also is providing funding for the 2000 and 2002 collection of high school transcript data for NLSY97 respondents. Finally, sections of the NLSY97 are funded by the Department of Justice, Office of Juvenile Justice and Delinquency Prevention and by the National Institute of Child Health and Human Development.

Figure 1.1 presents a summary of the topics covered by NLS data. The core repeating modules are supplemented with topical series administered to particular cohorts during selected survey years. All topics are not necessarily available for all survey years or all cohorts; consult the cohort-

specific chapters in this handbook or each cohort's user's guide for more information.

NLS data sets

The cohort-specific main data files summarized in figure 1.2 are available to the public. Each file contains the cumulative record of each respondent through the current release date.

In addition to the main data files, a variety of special data files are available (figure 1.3). These files, primarily designed to be used in conjunction with variables from a cohort's main file, have been constructed from data collected during the main surveys, from supplementary questionnaire data, or from external data sources.

Chapters 2 through 6 of this handbook discuss in detail each NLS cohort and the contents of the data files; information on accessing the data files is found in chapter 8.

Uses of the NLS

For more than three decades, NLS data have served as an important tool for economists, sociologists, and other researchers interested in the study of earnings, job search and separation, labor supply, labor market inequities, and human capital investments (Borus and Wolpin, 1984; Cherlin, 1980; Leigh, 1983; O'Neill, 1983; Parnes, 1972, 1976, 1979). Researchers also have used these data to study the impact of governmental policies and programs and the effect of various social-psychological factors on labor force participation.

The broad range of core NLS data, the topical expansion of the ongoing surveys, and the replication of cohorts across time make the NLS a rich information source for the continued study of many issues. These include life-cycle changes, the family, the aging process, retirement decisions, geographic and occupational mobility, and a host of other topical analyses.

While the NLS data can be used for cross-sectional studies, the longitudinal nature of the data offers significant advantages to researchers interested in causal processes.

Figure 1.1. NLS data content: Core and supplemental data collections

Core data collections	Supplemental data collections
Work and nonwork experiences Training investments Schooling information Health conditions Household composition Marital histories, children, and dependents Family assets and income Geographic residence and environmental characteristics	Family background and demographic characteristics Child development School records, aptitude, and intelligence scores Attitudes, aspirations, and psychological well-being Military experiences Work-related discrimination Retirement plans, pension eligibility, and pension plans Volunteer and leisure time activities Alcohol, cigarette, and substance use Delinquent and criminal activities and arrest records Household chores, child care, and care of ill and disabled persons

Event histories covering topics such as employment, education, marriage, and childbearing support a variety of methodological approaches to research. The frequent overlap in data content among cohorts, coupled with the variety of age ranges covered by the different samples, invites cross-cohort comparisons and studies of social change.

An Internet bibliographic database (<http://www.nlsbibliography.org>) provides annotated citations for research using the NLS cohorts. The continued relevance of the NLS for the research community in general, and for policymakers at the Federal, State, and local levels, is evident in the high number of citations added to the list each year. See chapter 7 for more information.

The Bureau of Labor Statistics publishes NLS data in occasional news releases and *Monthly Labor Review* articles, as well as in an *NLS Discussion Paper* series.

Project administration

Responsibility for the administration of the NLS resides with the U.S. Bureau of Labor Statistics, an agency of the U.S. Department of Labor. Established in 1884, BLS is responsible for the analysis and publication of data on employment and unemployment, prices and living conditions, compensation and working conditions, productivity, occupational safety and health, and employment projections. Its mission is to promote the development of the U.S. labor force by gathering information and disseminating it to policymakers and the public so that they can make more informed, and thus more efficient, choices.

The NLS program supports BLS in this mission. The surveys are part of a longitudinal research program that includes in-house analyses, a grant program, and other special projects. The NLS is housed in the Office of Employment and Unemployment Statistics. Direction for the NLS is the responsibility of the Director of the National Longitudinal Surveys program. BLS contracts with CHRR to manage the original cohorts and NLSY79 cohort, to share in the design of the survey instruments, to disseminate the data, and to provide user services. The Census Bureau undertakes collection of data for the mature and young women's cohorts through an interagency agreement with BLS. Data collection for the NLSY79 and NLSY97 children samples is subcontracted to the National Opinion Research Center (NORC) at the University of Chicago. BLS contracts with NORC to manage the NLSY97 cohort and collect the data for this survey; CHRR is subcontracted for NLSY97 questionnaire programming, data dissemination and user services, documentation, and variable creation.

The NLS Technical Review Committee assists the project in its efforts. Meeting twice each year, committee members provide recommendations regarding questionnaire design, additional survey topics, potential research uses, methodological issues, data distribution, and user services. The committee is multidisciplinary, reflecting the wide range of social scientists who use the NLS data.

Ultimate responsibility rests with BLS for overseeing all aspects of the work undertaken by the other organizations. For more information about the NLS, contact:

Figure 1.2. NLS main data files

Cohort	Period	File contents
Older Men	1966–83 and 1990	Provides the longitudinal record of each respondent for the 1966–83 and 1990 interview years. Includes information collected during the 1990 interviews with the widows or other family members of deceased sample members and cause of death information collected from State vital records departments.
Mature Women	1967–99	Contains the longitudinal record of each respondent for the 1967–99 interviews. Supplemental pension plan data are described below.
Young Men	1966–81	Includes the longitudinal record of each respondent for the 1966–81 interview years. Includes information from the separately administered 1968 survey of high schools attended by respondents in this cohort.
Young Women	1968–99	Contains the longitudinal record of each respondent for the 1968–99 interviews. Includes information from the separately administered 1968 survey of high schools attended by respondents in this cohort.
NLSY79	1979–98	Provides the longitudinal record of each respondent for the 1979–98 interviews. Includes information from the separately fielded 1980 high school survey, the 1980 ASVAB administration, and the 1980–83 transcript data collections. Supplementary data for this cohort can be found in the special data files discussed below.
NLSY97	Rounds 1 and 2	Contains the record of each youth for both survey rounds. Includes information from each youth interview, as well as the round 1 parent interview and the round 1 screener, household roster, and nonresident roster questionnaire. This CD includes a number of created variables.

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Users can also visit the NLS Internet site: <http://stats.bls.gov/nlshome.htm>.

Current status and directions

As the NLS research project enters its fourth decade, the 21st survey of the young women and the 20th survey of the mature women are scheduled for summer 2001. The fourth survey of the NLSY97 will be conducted in the winter of 2000–01. The 19th survey of the NLSY79 and the 8th survey of the Children of the NLSY79 were finished in late 2000, with round 20 and round 9, respectively, planned for 2002.

Technological advances have affected the mode of NLS interviews and the medium in which NLS data are distrib-

uted. The paper-and-pencil survey administrations, used since the inception of the surveys, have been replaced with computer-assisted personal interviews (CAPI). The 1993 survey of the NLSY79 marked the first time that computer-assisted interviews were administered to the full sample of NLSY79 respondents. This event completed a 5-year effort by BLS, CHRR, and NORC to improve the quality and timeliness of NLS data releases. Analyses of two NLSY79 CAPI experiments conducted during 1989 and 1990 suggest higher data quality, improvements in data transfer, and lower data processing costs for these CAPI interviews (Baker and Bradburn, 1992; Bradburn, Frankel, et al., 1992; Olsen, 1991; Speizer and Dougherty, 1991). Computer-assisted survey interviewing software also has been used in the interviews with the NLS of Mature Women and Young Women since 1995, as well as in all rounds of the NLSY97.

The NLSY97 uses an audio computer-assisted self-interview (ACASI) to obtain potentially sensitive information from both the parent (round 1 only) and the youth. A replacement for the paper self-administered questionnaire, the audio version improves response quality by reducing entry

Figure 1.3. NLS special data files

Cohort	Period	File contents
Mature Women Pension Plan File	1989	Includes detailed information on the characteristics of 815 pension plans for which respondents or their husbands were eligible in 1989. These data were coded using the protocol developed for the Survey of Consumer Finance and include plan definitions, benefit formulas, and eligibility requirements.
NLSY79 Children	1986–98	Contains information about the children born to females of the NLSY79. Data were collected during the biennial assessments of each child, which began in 1986, and during interviews of young adults (aged 15 and over) beginning in 1994. Information on prenatal care, maternal and child health, household composition, and maternal work history collected during the main surveys of the NLSY79 also is included on the child files.
NLSY79 Work History	1979–98	Provides a constructed week-by-week longitudinal record of labor force activity for each respondent from January 1978 through the 1998 interview date. Three arrays provide information on the respondent's labor force and military status, usual hours worked, and dual jobs for those respondents working at more than one job during any of the survey weeks.
NLSY79 Geocode	1979–98	Identifies the State, county, and metropolitan statistical area of each NLSY79 respondent's current residence; provides selected environmental data for the respondent's county or metropolitan area of current residence. The geocode CD also includes all main file data.
NLSY79 Women Support Network File	1983–85	Includes details on the geographic proximity of relatives, friends, and acquaintances of female NLSY79 respondents who were interviewed during 1983–85.
NLSY97 Event History	Rounds 1 and 2	Contains constructed event history variables regarding respondents' employment, schooling, marriages and cohabitations, and participation in government assistance programs. The CD-ROM also includes all main file data.
NLSY97 Geocode	Rounds 1 and 2	Identifies the State, county, and metropolitan statistical area of each NLSY97 respondent's current residence; provides selected environmental data for the respondent's county or metropolitan area of current residence. The geocode CD also includes all main file and event history data.

errors, permitting more complex questionnaire design, and minimizing errors due to respondent literacy problems. The respondents can choose to read the questionnaire from the computer screen or, if preferred, they can use headphones to listen to the questions as they appear on the screen. The ACASI is conducted in the language (English or Spanish) selected by the respondent.

NLS data sets are distributed on compact discs. Search and extraction software developed by CHRR allows users to easily peruse the variables present for a given cohort, to select variables of interest, and to create ASCII extract files with SAS or SPSS control cards (Sheets, 1991).

Organization of this handbook

The rest of this publication comprises eight chapters:

- Chapters 2 through 6 contain overviews of the NLSY97, the NLSY79, the NLSY79 children and young adults, the mature and young women, and the older and young men. Each chapter provides information on the samples, the interviews, and the major data elements available within the data sets.
- Chapter 7 presents a sampling of recent research based on data from the National Longitudinal Surveys.
- Chapter 8 describes the various NLS CD-ROMs, the search and extraction software present on the discs, and the comprehensive documentation available to researchers.
- Chapter 9 directs readers to other publications, manuals, and reports that provide more information on the NLS.

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